

UNIVERSITI TEKNOLOGI MARA

FACTOR THAT CONTRIBUTES TO FUNGAL GROWTH AN IMPACT ON UITM PERAK OFFICE BUILDING

ERFA RAUHAH BINTI SHAHRIL ANUAR 2019814586

Dissertation submitted in partial fulfillment of the requirement for the degree of **Bachelor of Building Surveying (Hons)**

Department Of Built Environment Studies and Technology

JULY 2021

ABSTRACT

The office is a building, area or space used by a work organization where this space is used to perform administrative work to achieve the objectives of an organization. However, on 11 March 2020 World Health Organization had announced Coronavirus disease 2019 (COVID-19) that has been spread to many countries as a pandemic. In Malaysia, the government has decided to implement 'Restriction of Movement Order' to overcome the spreading the COVID-19. During MCO, it starts a new working environment which they had to work from home. In this situation, this give impact to office building which is not being use for long period of time it may lead to fungal growth. There are several factors that contribute the fungal growth in the building which are water leakage or moisture, poor air circulation and poor maintenance. This research aim is to identify the causes of fungal growth and impact to the UiTM Seri Iskandar, Perak office building. Besides that, there are three objectives for this research to be held which are to identify the factors, contribute fungal growth, to identify the symptoms of fungal growth at the office building and to identify the element in office space and causes that affected by the fungal growth. To achieve the objective of this study. This study conducted using Questionnaire survey with target of the respondents consists of the whole staff of UiTM Seri Iskandar, Perak and Lecturers. There is also the literature review, which assists in getting a comprehensive knowledge of the study. This research will offer specifics of findings linked to the research study at the conclusion of the chapter, as well as recommendations for future research on fungal growth in the workplace.

ACKNOWLEDGEMENTS

In the name of Allah, the Most Gracious and the Most Merciful. Alhamdulillah, all praises to Allah for the strengths and His blessing in assisting me to complete this research for Academic Project II (BSR 658) within the time given.

First and foremost, I want to thank my supervisor, Sr. Dr. Suriani Binti Ngah Abdul Wahab, for all her help. With the vast knowledge she shared, her advice really helped me in finishing my academic assignment. Her persistence and dedication in encouraging me to finish my academic project are much appreciated.

Besides, I would like to thank my parent and my family for the endless encouragement financially and spiritually especially during my tough times. They are the source of my strength directly and indirectly. I would never have been able to finish my academic project without the help from my friends. All the support and help I received have inspired to complete my study successfully with their ideas, critics, and support.

Finally, not to forget to the respondents who took their time to participate in my study. Without their presence and cooperation, I would not be able to obtain the required information for my study. Their involvement means a lot to me to get all the necessary information.

Alhamdulillah, thank you.

TABLE OF CONTENTS

| RACT | i |
|---|--|
| OWLEDGEMENTS | ii |
| DF TABLES | vii |
| DF FIGURES | viii |
| OF CHARTS | ix |
| DF ABBREVIATIONS | X |
| | |
| FER ONE: INTRODUCTION | 1 |
| Study Background | 1 |
| Problem Statement | 2 |
| Research Aim, Objective And Question | 3 |
| Scope And Limitation | 3 |
| Research Methodology | 4 |
| Significant Of Study | 6 |
| Chapter Outline | 6 |
| .1 Chapter 1: Introduction | 6 |
| .2 Chapter 2: Literature Review | 6 |
| .3 Chapter 3: Research methodology | 7 |
| .4 Chapter 4: Result and Discussion | 7 |
| .5 Chapter 5: Conclusion and Recommendation | 7 |
| | Problem Statement Research Aim, Objective And Question Scope And Limitation Research Methodology Significant Of Study Chapter Outline 1 Chapter 1: Introduction 2 Chapter 2: Literature Review 3 Chapter 3: Research methodology 4 Chapter 4: Result and Discussion |

CHAPTER ONE INTRODUCTION

1.1 STUDY BACKGROUND

The office is a building, area or space used by a work organization where this space is used to perform administrative work to achieve the objectives of an organization. To achieves the objective, need s good and productive employees. It is important to have office building or space that full fill the criteria to archiving the high human comfort for space. However, on 11 March 2020 World Health Organization had announced Coronavirus disease 2019 (COVID-19) that has been spread to many countries as a pandemic.

In Malaysia, the government has decided to implement 'Restriction of Movement Order' to overcome the spreading the COVID-19. All the business, government and private premises need to be closed during the movement control order (MCO) except essential services and outlet that selling daily essentials can be opened. During MCO, it starts a new working environment which they had to work from home. In this situation, this give impact to office building which is not being use for long period of time. When the office building not being use in long period of time, it may lead to fungal growth in the building due to poor air circulation in the building.

The fungal growth easily on wet or moist material. The fungal producing tiny spores as it grows and the tiny spores float to through and widespread to the environment and will flow too indoor. The sources of fungi in the floor and surface dusts of buildings include accumulation of organisms that derive from outdoor air, micro biota from humans, pets and rodents, material growth and soil detection (Dannemiller et al., 2016) It can be noticed everywhere, indoors, and outdoors. The present of water, nutrients, sufficient temperature, and oxygen are the requirements for fungal growth. Water supply is usually a limiting factor for growth indoors as nutrients to support fungal growth in the building (Dannemiller et al., 2016)